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A PECULIAR VARIATION OF *TEREBRATALIA TRANSVERSA* SOWERBY.

H. W. SHIMER.

THIS specimen (Figs. 2–5) of this very variable species differs from the type as figured by Davidson (Fig. 1) in its more elongate form, thicker valves, obscurity of plications, and less development of the mesial sinus in the brachial valve.[1] Aside from its normal variation the specimen is remarkable for its extremely rugose surface due to the great inequality in the development of growth lines and also for the greatly abraded umbo of the pedicle valve. This abrasion is so great that it brings to view the unfilled cavity behind the buttress supporting the teeth which shows as a rounded hole, through which a bristle can be passed, on each side of the pedicle opening.

Dall, after an examination of this specimen, wrote us that it is "an unusually worn and deformed specimen which has been crowded by its fellows so as to grow out of shape and worn by rocking on its pedicle until at least one quarter of an inch of shell has been removed." In reference to the two holes above mentioned he suggested that between the shell wall and the buttress which supports the hinge in the dorsal valve there is a cavity. With the growth of the shell and the buttress this cavity is prolonged ; at times it is filled in part with shelly matter and at others it persists as a tube running up with the curve of the umbo, one on each side of the pseudodeltidium. If these tubes remain empty and the umbo is sufficiently abraded, they will appear on the surface of the shell as two little holes. An abrasion to this extent is very unusual ; the nearest approach to it noticed outside of this specimen was in *Terebratula harlani* Morton where the former cavities though filled with shelly growth, yet showed faintly where weathered.

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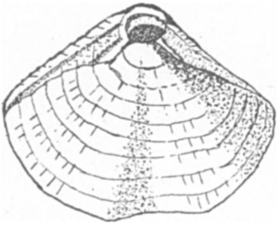
[1] For other figures and variations of this species see "A Monograph on Recent Brachiopoda" by Davidson, *Trans. Linn. Soc. London*, ser. 2, vol. 4, and *Amer. Journ. Conch.*, vol. 6, pl. 6.

This specimen and two other pedicle valves of the same species were collected by Professor W. O. Crosby of Massachusetts Institute of Technology in the summer of 1904; they were found on the beach at high tide at Kayak Village on Wingham Island, Controller Bay, Alaska. They are now in the collection of the Boston Society of Natural History, catalogue numbers 449 and 450.

The writer is indebted to Professor W. H. Dall of the United States National Museum and Professor Charles Schuchert of Yale University for the identification of this peculiar form.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.



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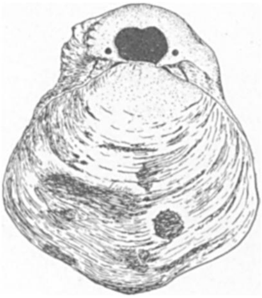

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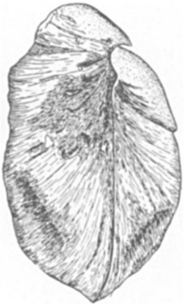

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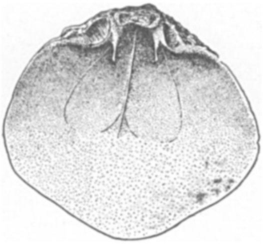

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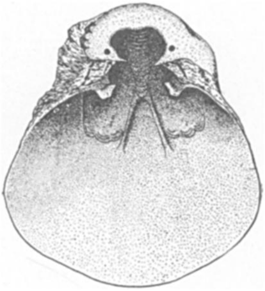

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PLATE I.

FIG. 1 — The type specimen of *Terebratalia transversa* Sowerby. Reproduced from pl. 16, fig. 6, in " A Monograph on Recent Brachiopoda," Davidson, *Trans. Linn. Soc London*, ser. 2, vol. 4.

FIG. 2.— Brachial view of a specimen of the same species from Wingham Island, Alaska, showing the greatly abraded umbo and the two small holes of the pedicle valve. Natural size. The muscular impressions are much more faintly marked than the figures indicate.

FIG. 3.— Side view of specimen seen in Fig. 2, showing the great irregularity in the growth of the shell. Natural size.

FIG. 4.— Interior of brachial valve of specimen seen in Fig. 2, showing the large cardinal process and the large dental sockets. Natural size.

FIG. 5.— Interior of pedicle valve of same specimen showing the heavy character of the shell about the umbo and the large teeth. Natural size.